Detailed Lesson Plan: (Approx 45 min to complete)

1) Instructor establishes daily procedure for assessment, note taking, instruction, and learning. Students and instructor have materials ready.

2) Instructor launches PowerPoint Presentation. Entire lesson can and should be conducted with instructor interacting with the class and the PowerPoint presentation eliciting responses from students and guiding them as the lesson progresses.

   a. Slides 1-3: Introduction. Delivery of introductory questions remains at instructor's discretion: students write down responses and/or students reply aloud.

   b. Slides 4-8: Weather vs Climate. Students should take notes on weather and climate from these slides. Note format (T-chart; Cornell Notes; etc) at instruction's discretion. Copying everything off all slides not necessary.

   c. Slides 8-10: Mediterranean Climate.

   d. Slide 10: Prairie Creek Redwoods and BHSO. Emphasis should be placed on the map – highlight distance between the parks. Point out the color coding of each park as well.

   e. Slides 11-13: Temperature and rainfall graphs with maps. Take time with these slides emphasizing the differences between the two and their locations within the state. Draw attention to the color again – asking students about the graphs. For example, "Which park has more annual rainfall?" Notes at instructor's discretion.

   f. Slides 14-15: Adaptations. Ask students questions about the plants at the state parks and their connection to the weather. Slide 15 has a culminating question. See if students can make connection between rainfall and wildfire frequency. If time permits, you may have students write down responses and justifications.

   g. Slides 16-17: BHSO Observing Weather. Re-emphasize BHSO as a great place to view weather.

   h. Slides 19-26: How Ocean, Wind, and Land interact to affect weather. (3-5 min) Potentially complex topic that may require repetition. Student can draw illustrations with a simple circle with four arrows and 'call-out' notes like, "the ocean heats slowly."

   i. Slide 27: Temperature for 3 State Parks. Pass out Lesson 1: ACTIVITY. Emphasize the distance from the ocean for each of the three parks.

   j. Slides 28-41: Graphing Data Lesson 1: Activity. (allow 25 min) For Slide 29 the instructor should spend extra time modeling and explaining. Toggle back and forth between 28 and 29 for clarity. For slides 30-35, instruct students to find graph at the top right corner of the Lesson 1 Activity sheet. Instructor can and should model how to draw the bar graph for students on the whiteboard. Level of time and specificity for explanation and practice will depend on the class and students. Correct graphs immediately follow blank graphs in PowerPoint – slide 31 answers slide 30, etc. Constantly interact with class eliciting responses to the questions. Questions and answers for slides 36-41, can be complete orally or hand-written depending on available time.

   k. Slides 42-43: Review lesson and topics covered. This should be an instructor led, but student driven review of concepts covered through out the lesson.

3) Collect materials and notes per instructor and class policy.

4) Students collect Word Search and Crossword Puzzle Activities as they exit for homework and independent practice or study.